

# Intel® 440BX Scalable Performance Board Development Kit

## Product Highlights

### Evaluation Board

- Scalable processor performance supporting speeds of 300 to 850 MHz with processor side bus (PSB) performance of 66 or 100 MHz.
- Populated with the Pentium® III processor with 256K on-die L2 cache at 850 MHz with 100 MHz PSB
- Option to add an Intel® Celeron™ processor at 433 or 850 MHz (100 PSB) for additional evaluation flexibility
- Supports Celeron processor in FC-PGA package with 128K on-die L2 cache (see ordering information)
- Supports Celeron processor in PPGA package with 128K on-die L2 cache (see ordering information)
- Validated with Intel® 440BX AGPset
- 32 MB SDRAM (100 MHz)
- Intel® Flash system BIOS ROM
- 82371AB PCI to ISA/IDE Xcelerator (PIIX4E)
- On-board post code debugger (port 80)
- Schematics, technical documentation and bill of materials
- Supports 370-pin FC-PGA and PPGA processors

### Included Hardware

- 4.3 Gbyte hard disk drive pre-loaded with the QNX Real Time Operating System\*
- Thermal solution attached
- PCI video graphics adapter using CHIPS\* 69000 HiQVideo\* Accelerator
- Intel® PRO/100+ Management Adapter (PCI)

### Board Peripheral Features

- SMC FDC37B787 Super I/O with Integrated Keyboard Controller and RTC
- Support for 4 IDE drives
- Support for 2 floppy drives



### User Accessible On-Board Connectors

- Two Serial RS-232 Ports; COM1, COM2
- PS/2 Keyboard and PS/2 Mouse (6-pin mini-DIN)
- 1 AGP slot
- Standard ATX Power Supply Connector
- One EPP/ECP Parallel Port (DSUB 25)
- 3 Standard PCI Expansion Slots
- 2 ISA Expansion Slots
- 2 USB Ports
- 2 SDRAM connectors

## Product Description

The Intel® 440BX Scalable Performance Board Development Kit is a physical kit consisting of an evaluation board, technical documentation and demonstration software for applied computing applications. Applied computing refers to market segments consisting of connected, high-performance, dedicated applications. The development kit supports Pentium III processors (0.18μ process) in 370-pin Flip-Chip Pin Grid Array (FC-PGA) package and Intel Celeron (0.18μ and 0.25μ process) processors in FC-PGA and Plastic Pin Grid Array (PPGA) packages. The board includes a processor side bus that automatically scales from 66 MHz to 100 MHz based on the processor used and the Intel 440BX AGPset. The kit features the Intel 440BX AGPset/PGA370 Scalable Performance Board Design Guide that helps expedite the design process. With the kit, customers are able to develop one board that can be populated with the Pentium III or the Celeron processor families without

## Product Description (continued)

modifying the board to meet a wide range of applied computing applications. The Intel® Scalable Performance Board Design Program provides developers with a wide range of price and performance options, can reduce the design and validation effort for multiple designs, lower the total cost of ownership by reducing warehouse inventory and manufacturing costs, and provide faster time to market.

## BIOS (current as of publication date)

### General Software\* Embedded BIOS\*

#### Operating System Support:

- Boots Windows 95\*/NT\*, OS/2 from disk
- Boots Windows CE\* from disk or ROM
- Boots DOS from disk or ROM
- Boots RT kernels, real or protected mode

## Development Kit Ordering Information

### Product

Intel® 440BX Scalable Performance Board Development Kit  
(Pentium III processor version)

EIAP3FMBDEVKIT

Intel® 440BX Scalable Performance Board Development Kit  
(Celeron processor version-0.18µ process)

EIACEL18FMBDVKT

Intel® 440BX Scalable Performance Board Development Kit  
(Celeron processor version-0.25µ process)

EIACEL25FMBDVKT

*Note: The Celeron processor version of the kit is the same as the Pentium III processor version except that it includes an additional Celeron processor for mounting onto the development board in place of the Pentium III processor. All of the Intel® 440BX AGPset Scalable Performance Board Development Kits come populated with a Pentium III processor.*

## Intel Access

Developer's Site	<a href="http://developer.intel.com">developer.intel.com</a>
Embedded Intel Architecture Development Kits	<a href="http://developer.intel.com/design/intarch/devkits">developer.intel.com/design/intarch/devkits</a>
Other Intel Support: Intel Literature Center	<a href="http://developer.intel.com/design/litcentr">developer.intel.com/design/litcentr</a> (800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada) International locations please contact your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

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The Intel® Applied Computing Development Kits are offered for evaluation and reference only. The board and processor may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available upon request.

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For more information, visit the Intel Web site at: [developer.intel.com](http://developer.intel.com)



UNITED STATES AND CANADA  
Intel Corporation  
Robert Noyce Bldg.  
2200 Mission College Blvd.  
P.O. Box 58119  
Santa Clara, CA 95052-8119  
USA

EUROPE  
Intel Corporation (UK) Ltd.  
Pipers Way  
Swindon  
Wiltshire SN3 1RJ  
UK

ASIA-PACIFIC  
Intel Semiconductor Ltd.  
32/F Two Pacific Place  
88 Queensway, Central  
Hong Kong, SAR

JAPAN  
Intel Kabushiki Kaisha  
P.O. Box 115 Tsukuba-gakuen  
5-6 Tokodai, Tsukuba-shi  
Ibaraki-ken 305  
Japan

SOUTH AMERICA  
Intel Semicondutores do Brasil  
Rue Florida, 1703-2 and CJ22  
CEP 04565-001 Sao Paulo-SP  
Brazil

## Software Overview

In order to provide customers with a complete development environment, Intel worked with various Independent Software Vendors (ISV) to provide supporting evaluation software for the development kits. The software applications in the kit are demonstration copies provided free of charge by the vendors. The software is licensed for evaluation purposes only. Software in the kit is subject to change without notice. Please contact the vendors directly for specific details pertaining to revision changes. Links to all of the software vendors supporting the kit are available via the Intel® 440BX Scalable Performance Board Development Kit webpage at [developer.intel.com/design/intarch/devkits/273314.htm](http://developer.intel.com/design/intarch/devkits/273314.htm).

## Evaluation Software (current as of publications date)

- QNX\* RTOS and Photon microGUI\* windowing system
- Microsoft\* Windows NT\* Embedded from VenturCom\*
- Annasoft\* Systems Jump Start for x86 drivers and Windows\* CE Launcher\*
- Wind River\* Systems Tornado\* 2.0 VxWorks\*
- Intel® Applied Computing System Firmware Library